Tar yields

To the editor – The unsigned News Analysis in the first issue of *Tobacco Control* is written by "one who has never believed that requiring a reduction in tar yield of cigarettes provides any health advantage whatsoever."[1] This degree of ignorance is not appropriate; the evidence has been extensively discussed and reviewed in many places (including, for example, the International Agency for Research on Cancer (IARC) monograph on tobacco smoking,[2] and the World Health Organisation–IARC scientific monograph on tobacco[3]). One important conclusion is that a large reduction in the very high tar deliveries still seen in many parts of Asia would substantially reduce the smoker's risk of lung cancer (and hence too the smoker's overall risk of premature death, since there is no good evidence of any net increase in the many other fatal effects of tobacco use). Of course the most important cause of cancer in the world is the cigarette and the second most important is the low tar cigarette, and of course cigarettes kill more people by other diseases than by cancer. But, other things being equal, in China alone implementation of the hard won recommendation that tar levels should be reduced could well eventually avoid a few hundred thousand deaths a year from tobacco, as long as it is not allowed to feed back into the political process and obstruct other important aspects of tobacco control.

RICHARD PETO
ICRF Reader in Cancer Studies, ICRF Cancer Studies Unit, Oxford, United Kingdom

1 First item under heading "What did you do in the (tobacco) war, Daddy?" *Tobacco Control* 1992; 1: 10.
2 International Agency for Research on Cancer. *IARC monograph on the evaluation of the carcinogenic risk of chemicals to humans. Tobacco smoking.* Lyons: IARC, 1986. (IARC monograph No 38, vol 38.)
3 Zaridze D, Peto R, eds. *Tobacco: a major international health hazard.* Lyons: International Agency for Research on Cancer, 1986. (IARC scientific publication No 74.)

In reply – Although the context of my comments would suggest that I was referring to Western cigarettes, which on average produce lower levels of tar than most cigarette brands available in Asia, I would maintain that the hoped for reduction in lung cancer deaths as a direct consequence of a reduction in tar levels is an illusion. Indeed, such a principle has enabled the tobacco industry to have become, in effect, our leading health educator, as increasing numbers of consumers have switched to lower tar brands – rather than stopping smoking – in the misguided belief that they can smoke more safely. Since 1979 reports of the US Surgeon General have warned that individuals who shift to supposedly less hazardous brands may in fact increase their health risk through compensatory deeper inhalation and the smoking of more cigarettes. The estimate by Peto and Lopez of 3 million deaths annually worldwide due to smoking during the 1990s[1] calls for bold actions that create disincentives for the use and promotion of tobacco, both on individual and societal levels. Continued clamour for a reduction in tar yields of cigarettes is a strategy that smacks of compromise with state run tobacco monopolies and an inability to imagine the dismantling of multinational tobacco conglomerates. It is good of Mr Peto to allude to "other important aspects of tobacco control." I can think of few global tobacco control strategies less important than the promotion of lower tar cigarettes.

ALAN BLUM
Editor, News and Commentary

1 Peto R, Lopez AD, and the WHO Consultative Group on Statistical Aspects of Tobacco-Related Mortality. Worldwide mortality from current smoking patterns. In: Durston B, Jamrozik K, eds. *Tobacco and health 1990 – the global war.* Perth: Health Department of Western Australia, 1990: 66–8. (Proceedings of the seventh world conference on tobacco and health.)

In reply – Because the credit line for News Analysis did not appear until the end of the section, some readers assumed that the articles in it were unsigned. All of the articles were in fact written by Dr Alan Blum. Dr Blum, who has been active in tobacco control for more than 20 years, is the former editor of the *Medical Journal of Australia* and the *New York State Journal of Medicine*. The theme issues on tobacco that he produced in 1983 at those journals were the first of their kind and a forerunner of *Tobacco Control*.

With respect to the issue of low tar cigarettes, I find myself somewhere between the positions articulated by Mr Peto and Dr Blum. Yes, a reduction in tar yields may be helpful in countries such as China, where the average tar yield is high and where public awareness of the health hazards of smoking is low. But as Dr Blum points out, the availability of "safer" cigarettes may reduce smoking cessation by giving health conscious smokers an alternative to quitting – that is, switching to lower yield brands. In developing countries this effect may be minimal because so few smokers are contemplating quitting. But in countries where tobacco consumption is on the decline the adverse effect of low tar cigarettes in discouraging smoking cessation may dwarf any public health benefit from their slightly lower carcinogenicity.

In the United States the cigarette industry has spent a disproportionate amount of its advertising and promotional budget on low-tar brands, using explicit or implicit messages that these brands are less hazardous or safe.[1] Its efforts, aided a bit by the federal government's "safe cigarette" programme in the 1970s, have had a substantial impact. The domestic market share of low tar cigarettes ($\leqslant$ 15 mg) has exceeded 50% since 1981.[2] According to the 1986 Adult Use of Tobacco Survey (AUTS), 38% of adult smokers have switched from one cigarette brand to another "just to reduce the amount of tar and nicotine."[3] The AUTS also showed that 21% of smokers believe that the kind of cigarettes they smoke are "probably less hazardous than others."[4] How many of these smokers might have quit if low tar cigarettes had never been introduced, or if the misleading advertisements for those brands had been banned?

Despite the importance and complexity of these issues, little research has been conducted to elucidate the *whole* impact of low yield cigarettes *on the population*. Besides the potential effect of low tar cigarettes in discouraging smoking cessation, other important questions remain unanswered and, indeed, unexplored. Because low yield cigarettes are less harsh, do they facilitate experimentation with and initiation of smoking among children and adolescents? Does the heavier use of flavouring agents in low tar brands create risks not present in higher tar cigarettes? What are the effects of the promotional campaigns for the new generation of products aimed at health conscious smokers, such as denicotined cigarettes, perfumed cigarettes ("the first cigarette that smells good"), and cigarettes reported to have less sidestream smoke? We encourage research and further commentary on this subject.

RONALD M DAVIS
Editor

1 Davis RM. Current trends in cigarette advertising and marketing. *N Engl J Med* 1987; 316: 725–32.
2 US Federal Trade Commission. *Federal Trade Commission report to Congress for 1989: pursuant to the Federal Cigarette Labeling and Advertising Act.* Washington, DC: FTC, 1992.
3 US Department of Health and Human Services. *Tobacco use in 1986: methods and basic tabulations from Adult Use of Tobacco Survey.* Atlanta, Georgia: Centers for Disease Control, Office on Smoking and Health, 1990.
4 US Department of Health and Human Services. *Reducing the health consequences of smoking: 25 years of progress. A report of the Surgeon General, 1989.* Atlanta, Georgia: Centers for Disease Control, Office on Smoking and Health, 1989: 181. (DHHS Publication No (CDC) 89–8411.)

Dialogue with the tobacco industry

To the editor – I refer to a comment ascribed to Dr S T Han, regional director of the Western Pacific Regional Office of the World Health Organisation (WPRO), suggesting dialogue between health advocates and the tobacco industry.[1]

Dr Han made this remark at an APACT (Asian Pacific Association for the Control of Tobacco) regional conference in Seoul in 1991 as part of a rousing address that encouraged delegates from Asia to take strong action against tobacco.

At the meeting similar criticism was made by a Western tobacco control advocate about Dr Han's remarks on aiming at a "frank exchange of knowledge and opinions" with the tobacco industry.

I attended this meeting and explained to the advocate and to the meeting that Dr Han was speaking from the Asian perspective where health professionals are dealing not only with the commercial transnational tobacco companies but also with national tobacco monopolies.

The monopolies currently behave very differently from the commercial transnational companies. In general, Asian monopolies admit the health hazards of tobacco, cooperate with government measures, and do not advertise their products.

I personally have had experience of working with government monopolies – for example, in China and Vietnam. These countries have supported tobacco control measures, funded Tobacco or Health conferences, and supported tobacco control legislation. Of course this cooperation is partial and almost certainly temporary, but while it lasts it is worth utilising.

I am extremely impressed with the Tobacco or Health programme of WPRO, and in particular the commitment of Dr Han on the tobacco issue, and I feel that the remark was particularly taken out of context.

JUDITH MACKAY
Director, Asian Consultancy on Tobacco Control, Hong Kong

1 Sixth item under heading "What did you do in the (tobacco) war, Daddy?" *Tobacco Control* 1992; 1: 11.

In reply – In spite of Dr Mackay's characterisation of Dr Han's proposal, his comments (printed verbatim in News Analysis) stuck out like a sore thumb from an otherwise thoughtful speech. Unbeknownst at the time to the "Western tobacco control advocate," an Asian journalist also questioned Dr Han about his call for a dialogue with the tobacco industry. One of the problems confronting the tobacco control movement is revisionism, stemming both from an ignorance of past mistakes as well as from a desire not to criticise them. Perhaps Dr Mackay is correct in her rose coloured assessment of Asian national tobacco monopolies, but, based on my reading of *Sino-World Tobacco* and other international tobacco industry trade publications, I do not share it. Even though the WHO may lack substantive resources, its leaders would better serve public health and inspire the even more poorly funded workers in tobacco control were they to express their utmost contempt for the tobacco industry in all its guises.

ALAN BLUM
Editor, News and Commentary

BOOKS

Book reviews and books of interest to Tobacco Control *should be sent to Simon Chapman, deputy editor at the address given on the inside front cover.*

Youth and prevention of tobacco use

Tobacco Talk – Educating Young Children About Tobacco. C D'Onofrio. (Pp 163; $14.95.) Santa Cruz, California: Network Publications, a division of ETR, 1991. ISBN 1-56071-052-7.

Within the United Kingdom the combined total of the number of deaths from smoking-related diseases and the number of people stopping smoking is estimated to be about 1300 a day (just over 300 deaths and an estimated 1000 successful quitters). This is the number of new smokers that the tobacco industry needs to recruit to maintain its market. The major source of new customers for tobacco products comes not from adults but from children and young people, with 84% of male smokers and 72% of female smokers taking up smoking before they reach the age of 20.[1]

In *Tobacco Talk* Carol D'Onofrio seeks to give parents, teachers, and care providers a structure for educating young children about tobacco. The ultimate targets of the material are children up to the age of 10. Traditional health education has often addressed the issue of tobacco use to adolescents aged 14–18. There is now widespread agreement that this is too late. The correct timing of interventions with children is of vital importance, and there is growing acceptance that the key time is before they begin to experiment – that is, before they reach the age of 9 or 10.

The book can be divided into two sections – chapters 1 and 2 provide the adult reader with the necessary background information and context for dealing with the subject while the remainder of the book provides a step by step guide to talking with children about tobacco.

In an extremely useful first section the author identifies several key issues. Of particular importance are the sections relating to the factors that influence children's acceptance or rejection of tobacco. It is important to note that the process is multifarious and lengthy, beginning in early childhood and continuing until early adulthood. The author reports, for example, that 90% of 3 year olds can "recognise the odour" of tobacco, with cigarette smoke evoking "agreeable thoughts in children who associate the smell with favourite people."

This and other subtle influences compose part of the complex pattern of life that children assimilate and which influences their future behaviour. The picture is complicated considerably by the mixed messages children receive. On the one hand, parents, teachers, and others may be telling children not to smoke while, on the other, the children see that tobacco is accepted by society, widely available, heavily advertised, associated with glamorous events, and used by adults in a variety of settings and situations. This contradiction – between what the children are told and what they see – casts doubt in their mind about the accuracy of the health messages and undermines the work of all involved in health education.

In dealing with this situation the author describes a four pronged strategy. The strategy covers the need to provide children with a smoke-free environment; the need to provide clear and consistent messages; the need to equip children with the skills they need to critically analyse the world around them; and the need to place tobacco issues in the wider context of children's general growth and development.

Throughout the book the author goes to great lengths to emphasise the importance of communicating with children – a process that involves listening as much as it does talking. She provides examples of activities, questions, and responses that can facilitate children's understanding. This provides general as well as specialist readers with a clear framework on which to construct their approach to the tobacco issue.

In the second section the author identifies five topics and "presents suggestions for talking about that topic in detail with children." Each chapter has specific goals of communication, provides suggestions for initiating discussion, gives examples of what might be said as well as activities to be undertaken, and identifies a number of special issues connected to the topic. The chapters are completed by a summary of the key messages "important in tobacco use prevention."

It is in this last section that the book's few weaknesses appear. In places its approach could be viewed as being didactic and condescending, with the text taking the form of a script to be followed as closely as possible. The non-American reader also has to come to terms with the occasional use of vernacular American, and many of the examples of situations are taken from everyday North American life.

However, despite these quibbles the book is straightforward and thorough in its approach, provides excellent background information, and gives many useful and stimulating ideas for helping young children to become the non-smoking adults of the future.

In addition it highlights the challenges that need to be faced by adults in terms of their own behaviour, the need to be open and honest when talking to children about tobacco, and the need to challenge the way in which tobacco is perceived by children to be accepted by society as a whole.

JOHN GRIFFITHS
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1 Wald N, Nicolaides Bouman A. *UK Smoking statistics.* Oxford: Oxford University Press, 1991.

Smoking cessation: addiction and pharmacology

New Directions in Nicotine Delivery Systems. Proceedings of a Conference held at Johns Hopkins University, Baltimore, September 24, 1990. Henningfield JE, Stitzer ML, eds. (Pp 103; $15.00 + $3.00 shipping from Cortlandt Communications, 500 Executive Boulevard, Ossining, New York 10562, USA.) Ossining, New York: Cortlandt Communications, 1991.

Cigarette smoking is now well recognised as a form of drug addiction. A landmark in this process was the 1988 report of the US Surgeon General, which concluded that the processes underlying addiction to nicotine are similar to those of other addictive drugs such as alcohol, heroin, and cocaine.[1] What distinguishes nicotine from other widely abused drugs is that its effects are subtle, and it does not cause socially disruptive intoxication, provoke violence, or impair performance. The central paradox is that whereas people smoke for nicotine they die mainly from the tar and other unwanted components in the smoke. Nicotine itself does not cause cancer or chronic obstructive lung disease, although it probably has a contributory role in causing smoking-related cardiovascular disease.

Progress in the campaign to reduce smoking has been held back by smokers' addiction to nicotine. One way to reduce the difficulties of giving up smoking is to provide nicotine from an alternative and less harmful source. Nicotine chewing gum has been shown to alleviate withdrawal symptoms, and its use can double the rates of smoking cessation achieved by placebo gum or behavioural methods alone. However, compliance with adequate gum use is a problem that has limited its therapeutic potential in primary care settings where large numbers of smokers can be reached.

The status quo of the past 5–10 years is about to be shaken by an exciting array of new nicotine replacement products which will soon be available as aids to giving up smoking. These range from nicotine skin patches, which take 6–8 hours to give very flat steady-state peak blood concentrations,

to nicotine vapour inhalers, which mimic the transient high nicotine boluses in arterial blood that follow within a few seconds of each inhaled puff of cigarette smoke. Nicotine skin patches from four different pharmaceutical companies are already available in some countries. A nasal nicotine spray, from which rapid absorption gives peak blood concentrations in about five minutes, has phase III trials almost completed in four countries. A nicotine vapour puffer is at an earlier stage of phase III trials, and nicotine lozenges are being developed as alternatives to the chewing gum.

All kinds of new questions will arise for consideration by policy makers, control agencies, and therapists. Which products should be free of medical control and available over the counter? Should the cost of treatment be reimbursed or met by health services? Should longterm use be permitted, or even encouraged, in those who would otherwise relapse to smoking? Should some of these products be promoted on the open market to compete with tobacco?

All these possibilities are considered openly or covertly in this excellent short book, which reflects the views and responses of US experts to these questions. The book focuses on issues raised by these new products and readers will find few details about the products or their efficacy in controlled trials. The book is the proceedings of a meeting at the Johns Hopkins University School of Medicine in Baltimore in September 1990. It is structured around eight formal presentations by top US researchers in the field, ranging from Neal Benowitz on the pharmacology and kinetics of nicotine from different products to John Pinney on the complex problems of delivering effective interventions within the US health care system. Other experts have the role of discussants, and the most interesting feature of the book is the discussion following each presentation. These are all the more interesting because of the participation of representatives of the pharmaceutical industry and those with intimate knowledge of the attitudes and workings of the US Food and Drug Administration. For me the most perceptive comments in discussion came from John Grabowski.

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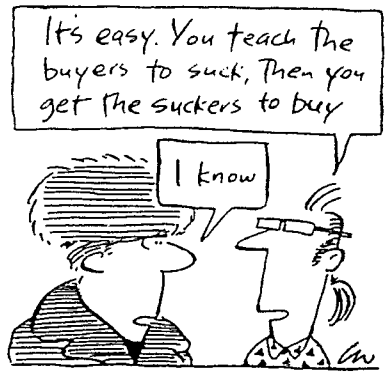
Reader in Addiction, Institute of Psychiatry, London, United Kingdom

1 US Department of Health and Human Services. *The health consequences of smoking: nicotine addiction. A report of the Surgeon General, 1988.* Atlanta, Georgia: Centers for Disease Control, Office on Smoking and Health, 1988. (DHHS publication No (CDC) 88-8406.)

Smoking cessation: the lighter side

Quit for Laughs. (Pp 143; $A11.95.) Sydney: Allen and Unwin (8 Napier Street North, Sydney, Australia), 1992. ISBN 1 86373 249 7.

One of the occupational hazards of working in tobacco control is that, until shown otherwise, people often assume you to be deadly earnest, dull, and boring. Aren't people who spend their life trying to work out better ways of dissuading others from smoking also likely to turn their nose up at the demon drink, eschew everything but the missionary position, pluck sweets from the mouths of children, and turn the music down at your party? Perhaps as a result, the field has spawned an unusually fair share of eccentrics and comedians, busily trying to compensate and set this caricature on its head. The clown prince of smoking control, Britain's David Simpson, has more jokes than a cigarette has toxic substances and can render them in 53 British regional dialects, Anglo-Indian, and even a reasonable Englishman's attempt at that most subtle and beautiful accent, Australian.



By Cathy Wilcox of the Sydney Morning Herald. *Reproduced with permission. All rights reserved.*

But it's all half true I'm afraid. Over the years I must confess to encountering more than a few colleagues whom I've sworn couldn't laugh to save their lives. You known the types: at 11 pm at the conference dinner they are still droning away about puff parameters or the ethics of the bogus pipeline. This book may be just the perfect gift for such people, for those of your friends who think your job is a little strange, and for smokers themselves. It is a collection of cartoons by many of Australia's leading press cartoonists, each example having been displayed originally at an exhibition organised by Sydney's Quit For Life campaign. Smoking has long provided rich pickings for humorists: Bob Newhart's famous dialogue in which one man explains the act of smoking to another who has never heard of it synthesises much of the essential absurdity of the procedure. The tobacco industry, too, employs more contortionists than the Moscow circus. Foot-in-mouth disease strikes many in the industry and cartoons in this book reflect several of the more virulent strains of that affliction.

A few of the ironies will seem obscure to those unfamiliar with particular Australian cigarette advertising campaigns. Most, though, have universal appeal and will be useful for reproduction in slides for those involved in teaching or trying to enliven their next conference paper on some less than engrossing topic. The book also contains dozens of anecdotes and one liners about quitting and smoking sent in by the public to the Quit for Life campaign. Some of these are truly amusing and whimsical, while others unfortunately betray a degree of sanctimony and contamination neurosis that I personally find tedious.

My favourite? A take off (illustrated) by the *Sydney Morning Herald*'s Cathy Wilcox of a long running Australian Benson and Hedges cryptic campaign in which animated cigarette packs reply with "I know" to visual puns with the intention of diminishing or mocking concerns about the health effects of smoking.

SIMON CHAPMAN
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Smoking cessation: strategies

How to Stop Smoking and Stay Stopped for Good. G. Riley. (Pp 144; £5.99.) London: Vermilion, 1992. ISBN 0-09-175178-0.

This self help book has two main approaches to smoking cessation. Firstly, it attempts some myth exploding. The author encourages the reader to re-examine learnt assumptions about smoking. For example, she asserts that the main reason for smoking is to get the "buzz," rather than the nicotine. Secondly, she asserts that the desire to smoke is "all in the mind" and can be overcome by adopting a simple strategy.

Alan Marsh and Gil Matheson, in their celebrated 1983 study on smoking attitudes and behaviour,[1] first taught us about the way adolescent smokers acquire their beliefs in the efficacy of cigarettes and how the spell of this mythology has to be broken before a smoker becomes an ex-smoker. What we know much less about is how most ex-smokers make the attempt to stop. Gillian Riley seems to have concentrated on this decision making process and observed that some smokers feel less deprived when they stop than others. She argues that those who feel deprived seem to be repressing their desire to smoke.

Her method of helping people to stop smoking requires each person to accept that they are going to desire a cigarette after they have stopped and to adopt a simple mental decision tree to combat each urge. Essential to her approach is the promise that each person is free to continue to smoke but that intending quitters are saying no to this desire. As time goes by, the desire will reduce in intensity, and the choice always remains. Repression of the desire doesn't work, she says, because the smoker is left with strong feelings of deprivation, which translate into uncomfortable withdrawal symptoms, such as anger, depression, anxiety, and weight gain.

The author also advocates that quitters continue to associate with smoking friends, keep cigarettes with them, and deliberately invoke the desire to smoke in order to keep reinforcing the decision. Some smokers may find this alarming.

Reading this book takes perseverance. I found it very repetitive and a little dictatorial in tone. I realised my irritation was also about the psychoanalytic style of the book. The author has an interpretation for every feeling. So, if I feel angry when I stop smoking, that is because I have not adopted the right mental set – that is, the author's method – and am feeling deprived. This is too simple and dogmatic for me.

I am also suspicious of anyone who claims

a 75% success rate: is this for the author's clinics or groups? If so, how does she arrive at this figure? Sales of the book will be no guide to success either. Presumably there are a lot of smokers out there who would just love to read a book and become an ex-smoker, just like many people read slimming books and hope to become slim.

I would like to think that this book will help a lot of people to stop smoking, but there is no way of knowing. I would prefer a book called *The People Say How They Gave Up* as a myth exploder to this form of exhortation.

LIZ BATTEN
Senior Research Fellow, Department of Psychology, University of Southampton, Southampton, United Kingdom

1 Marsh A, Matheson G. *Smoking attitudes and behaviour. An enquiry carried out on behalf of the Department of Health and Social Security by the Office of Population Censuses and Surveys*. London: HMSO, 1983.

Smoking prevention and cessation

Smoking Prevention: Helping People Stop Smoking (40 pp); **Smoking Prevention: An A–Z of Useful Ideas** (68 pp); **Smoking Prevention: A Guide to Using the Media** (28 pp); **Smoking Prevention: A Guide to Agencies and Resources** (52 pp). (£1.50 each or £5.00 for the set including postage and packing, but a contribution may be required for bulk orders. Available from HEA HELIOS Project, Bristol Polytechnic, Redland Hill, Bristol BS6 6U2, United kingdom; tel (44 272) 238317; fax (44 272) 466928.) Bristol: HEA HELIOS Project, 1992.

This series of four booklets provides a comprehensive set of good ideas for the practical implementation of smoking prevention and cessation initiatives.

Although the booklets are aimed at people working in smoking prevention, they could also prove useful to a wider audience – for example, people working in health education and health promotion, including school teachers. In addition, the strategies described within the booklets could be implemented successfully with a wide range of target audiences, from primary school children to retired senior citizens.

An *A–Z of Useful Ideas* provides an excellent compilation of strategies for implementing smoking prevention initiatives. The strategies cited are drawn from life situations that have proved effective in promoting non-smoking. For example, one strategy involved the production of a paper chain with 11 000 signed links from community members. Another involved sponsoring a music event to promote an organisation's public image. In addition, the strategies illustrated skills based approaches, which are more effective than the isolated provision of information in preventing the uptake of smoking.[1–3] For example, various strategies entailed building non-smoking messages into crosswords, graffiti, posters, advertisements, and cartoons and using media personalities to promote non-smoking, as well as various incentives to encourage smokers to stop, such as adopting a non-smoking partner or receiving an award after quitting for one week. A selection of cartoons and pictures relevant to the non-smoking issue are also included and could easily be copied and incorporated into smoking prevention initiatives.

A Guide to Using the Media is an excellent manual to help people use the media more successfully to promote non-smoking. The booklet guides the reader through the basics of developing a newsworthy story, developing a press release, accessing a range of media (newspapers, television, and radio), and using the media to oppose the tobacco industry. Throughout the booklet case studies are drawn on to illustrate the strategies suggested.

Helping People Stop Smoking presents a useful array of strategies that smoking cessation workers can use to help individuals to stop smoking. These are consistent with evaluations reporting effective smoking cessation initiatives.[4,5] Additional information is included on effective strategies for particular audiences, such as emphasising the shorter rather than longer term effects of smoking to encourage young smokers to stop. The strategies cited would be applicable in various settings from individual counselling sessions and group situations to the broader settings of workplaces or schools. In addition, background information is included to guide the reader through the process of smoking cessation from thinking about stopping to relapse and maintaining a non-smoking status.

A Guide to Agencies and Resources provides a comprehensive listing of smoking prevention agencies and resources available in the United Kingdom. It therefore presents a useful guide for workers in smoking prevention to locate needed resources and initiate networking among themselves. The guide should also contribute to minimising the unnecessary duplication of resources that persists worldwide. This is an especially important issue given that health promotion budgets are limited.

The only weakness of this series of booklets from an international perspective is that the agencies and resources cited in the booklets are drawn only from the United Kingdom. However, the excellent array of smoking prevention strategies presented is applicable internationally.

KYM SCANLON
Project Officer, New South Wales State Cancer Council, Sydney, Australia

1 Silvestri B, Flay B. Smoking education: comparison of practice and state of the art. *Prev Med* 1989; **18**: 257–66.
2 Rundall T, Bruvold W. A meta-analysis of school based smoking and alcohol use prevention programs. *Health Educ Q* 1988; **15**: 317–34.
3 Tobler N. Meta-analysis of 143 adolescent drug prevention programs: quantitative outcome results of program participants compared to a control or comparison group. *Journal of Drug Issues* 1986; **16**: 537–67.
4 Own N, Halford K, Gilbert A. *Smoking in health care: a behavioural approach*. Sydney: Grune and Stratton, 1986.
5 Brownell K, Marlatt G, Lichtenstein E, Wilson G. Understanding and preventing relapse. *American Psychologist* 1986; July: 765–82.

Books received or brought to our attention

● Amos A, Bostock Y. *Putting women in the picture. Cigarette advertising and coverage of smoking and health in women's magazines*. London: BMA, 1992. £2 United Kingdom, £3 overseas, discounts for multiple copies.

● Burns D, Pierce J P. *Tobacco use in California 1990–91*. Sacramento: California Department of Health Services, 1992.

● Centre for Behavioural Research in Cancer. *Health warnings and contents labelling on tobacco products. Review, research and recommendations prepared by the Centre for Behavioural Research in Cancer for the Ministerial Council or Drug Strategy Tobacco Task Force*. Melbourne: CBRC, 1992. $A30 postage paid from CBRC, Anti-Cancer Council of Victoria, 1 Rathdowne Street, Carlton South, Victoria 3053, Australia; fax (61 3) 663 7809.

● Charlton A, Moyer C, eds. *Children and tobacco: the wider view*. Geneva: International Union Against Cancer, 1991. ISBN 2-88236-003-7; Sw fr 15 plus postage.

● Chollat-Traquet C. *Women and tobacco*. Geneva: World Health Organisation, 1992. ISBN 92 4 156147 5; Sw fr 26 (in developing countries Sw fr 18.20).

● Health Education Authority. *Pausing for breath: a review of No Smoking Day research, 1984–1991*. ISBN 1 85448 394; £3.95 plus postage.

● Jain K.K. *Carbon monoxide poisoning*. St Louis Missouri: Warren H Green, 1990. ISBN 0-87527-483-8; $37.50 (has chapter on smoking).

● Kirkman L, Menichelli eds. *Strategic communications for nonprofits*. Washington, DC: Benton Foundation and Center for Strategic Communications, 1992. (Nine book series: *Media advocacy* ($7), *Talk radio* ($7), *Op-eds* ($7), *Strategic media* ($10), *Electronic networking for nonprofit groups* ($7), *Voice programs* ($7), *Cable access* ($7), *Using video* ($7), *Strategic communication for nonprofits* ($7); $50 for set.) Available from Benton Foundation, 1710 Rhode Island Avenue, NW, Fourth Floor, Washington, DC 20036, USA.

● Last J M, Wallace R B, *et al*, eds. *Maxcy-Rosenau-Last public health and preventive medicine*. 13th ed. Norwalk, Connecticut: Appleton and Large, 1992. ISBN 0838 561888; $120.00. (Has chapter on tobacco.)

● R O W Sciences Inc, eds. *Resisting tobacco in developing countries. Working papers in support of the eighth world conference on tobacco or health: building a tobacco-free world, Buenos Aires, Argentina*. Obtainable from the American Cancer Society, Atlanta, Georgia, USA.

● Ward N, Nicolaides-Bouman A, eds. *UK Smoking statistics*. 2nd ed. Oxford: Oxford University Press, 1991. ISBN 0-19-261680-3; $75.

● Wilson D. *Building a tobacco blockade*. London: Health Education Authority. £2.95 from Distribution Department, Health Education Authority, Mabledon Place, London WC1H 9TX, United Kingdom.

From the World Health Organisation

Tobacco or Health

This column will be used by the World Health Organisation's programme on Tobacco or Health (TOH) to present, at regular intervals, important programme developments and activities. The successful implementation of some of these activities will depend, as is the case for other WHO activities, on the symbiotic efforts of the organisation's member states and its secretariat. Information or other support is thus welcomed for the successful implementation of TOH projects, and potential contributors are invited, at any time, to contact the programme.

* * *

Progress is being made in the development of the WHO tobacco or health data centre which is assembling profiles of the tobacco or health situation in each country, focusing primarily on the compilation and validation of data on trends in consumption, prevalence, and mortality. WHO has also developed a new method for monitoring the smoking epidemic in countries with reliable mortality data. The method provides an estimate of smoking attributable mortality by age, sex, and cause of death based on a scaling of the observed lung cancer rate. Application of the method to all developed countries has yielded new, detailed, and comprehensive estimates of the mortality due to smoking in developed countries. Recent WHO research has included the application of the technique to provide countries with guidelines to estimate such parameters as the proportion of all cancer deaths due to smoking based solely on the lung cancer death rate. A summary of the attributable fractions is provided in the table.

The data centre is also drawing on existing databases and, where necessary, mechanisms will be created to ensure the consistency and validity of data. Thus the unique WHO data collection on causes of death, dating back to 1950, will be integrated into the data centre, enabling the programme to monitor the epidemic of tobacco related diseases in more than 70 countries. With the progressive expansion of valid data on tobacco use, and a firm commitment to promote epidemiological research into smoking related diseases in different populations, the WHO data centre is progressively becoming a principal source of scientific data and information on the tobacco epidemic.

* * *

To allow more precise guidance for individual countries in their tobacco control efforts, the Tobacco or Health programme has initiated a project to establish methods and guiding principles for the evaluation and monitoring of national tobacco control policies, programmes, and activities. This guidance will provide information on the reasons and methods used for the evaluation of such programmes and will provide examples emanating from both developed and developing countries. However, since examples from developing countries are limited, and often difficult to obtain, relevant information on this subject is sought. The Tobacco or Health programme has already consulted international experts who have confirmed their support for the project. Collaboration has also been established with the International Agency for Research on Cancer (IARC).

* * *

The second European seminar on tobacco or health for national policy advisers and national programme managers was held in Budapest from 22 to 24 January 1992 under the auspices of the Tobacco or Health programme of the WHO Regional Office for Europe (EURO). More than 70 participants were present from almost all the countries of Eastern and Western Europe. The venue of the meeting was well chosen as the prevalence of smoking and the rate of smoking related deaths in Hungary are among the highest in the world. Recent WHO estimates indicate that during the 1990s, 19% of female deaths and 46% of male deaths among people aged 35–69 in Hungary will be attributable to smoking. Only Polish men at 51% rank higher on this indicator. Already more than one million Europeans die every year from diseases caused by smoking.

One of the purposes of the seminar was to assess progress made towards a smoke-free

Estimated percentage of cancer deaths due to smoking

Age standardised lung cancer mortality [per 100 000]	*Age specific lung cancer mortality [per 100 000] at ages 55–64 years*	*Average % of all cancer deaths attributable to smoking*
	Males	
≥ 100	≥ 250	47
80–99	200–249	43
50–79	150–199	38
35–49	75–149	24
	Females	
20–34	50–99	15
10–19	25–49	5
< 10	< 25	2

TAB 1

For further information contact: Dr J R Menchaca, Programme Manager, WHO Tobacco or Health Programme, 20 Avenue Appia, CH-1211, Geneva 27, Switzerland. (Tel (41 22) 791 21 11; fax (41 22) 791 07 46.)

Europe. In 1987 the WHO Regional Committee for Europe adopted a five year action plan on tobacco. This ambitious plan outlined objectives and timetables that would be needed to lead to the adoption of comprehensive tobacco control policies by 1992, so that the Health for All targets of 1995 of a minimum of 80% non-smokers in each country and a 50% reduction in tobacco consumption could be achieved.

In reviewing progress made towards these objectives, participants were suitably encouraged. One group of countries has had comprehensive tobacco control polices for some time; most of these countries have recently implemented new measures to further strengthen their tobacco control polices – for example, Finland and Portugal. Other countries have taken positive steps towards implementing the action plan, but their actions are too recent for effectiveness to be assessed – for example, France – or their actions, while representing progress, fall short of the comprehensive programmes called for in the action plan – for example, Czechoslovakia. In a third group of countries, few if any actions have been taken to control tobacco – for example, Germany. In many of these countries, including many Eastern European countries, tobacco consumption is still increasing.

While participants noted that encouraging progress had been made in many countries, overall results still fell short of the targets and objectives. It was concluded that unless present trends change dramatically the countries of EURO would not be able to fully reach the target of reducing tobacco consumption by 50% by 1995 and that no country was likely to succeed in having 80% of its population as non-smokers by the same date. "*While a small number of countries may reach these goals by the year 2000, overall the number of tobacco related deaths is expected to continue to increase.*"

In September 1991 the WHO Regional Committee for Europe met in Lisbon and noted that there had been delays in achieving targets for the reduction of smoking. They subsequently asked the Regional Director to collaborate with member states and intergovernmental organisations, to develop a draft second action plan for a tobacco-free Europe for the period 1992–6. Participants in the Budapest seminar agreed that the content of the first action plan was not flawed in any fundamental way. However, greater efforts were needed on the part of member states for its implementation with increased international cooperation, the development of national and international alliances for health, and focused national and international collaboration to solve specific policy implementation problems.

From the International Union Against Cancer

INTERNATIONAL UNION AGAINST CANCER
Tobacco and Cancer Programme

UICC Senegal summit of African tobacco control leaders

Dee Burton

A summit of African tobacco control leaders was held in Dakar, Senegal, 20–22 November 1991. The summit was organised by the International Union Against Cancer (UICC), funded by the American Cancer Society, and hosted by the International Development Research Center (CRDI/IDRC, based in Ottawa) West Africa office. The summit was strictly a work session, with no formal papers presented. Activists from seven African countries (Egypt, Kenya, Liberia, Nigeria, Senegal, Uganda, and Zambia) worked together with members of an international support team (from Canada, the United Kingdom, and the United States) to share experiences and strategies for strengthening the tobacco control effort on the African continent. Tobacco control leaders from South Africa, Sudan, and Tanzania were unable to attend, but shared their experiences through correspondence.

Following the opening session the work began with leaders providing an update on activities in their respective countries. The achievements described, including major country wide legislation, successful counter industry battles, and public education and information programmes are remarkable in that they have been attained with virtually no programme funds and usually very little other resources. Some of the highlights of activities in each country, including successes and continuing problems, are given below.

Country reports

NIGERIA

A tobacco control law banning smoking in public places and requiring health warnings on tobacco advertisements was passed in Nigeria in 1990. A considerable number of offices in Lagos, following a massive campaign conducted by the Nigerian Commission on Smoking or Health and the Federal Ministry of Health, have instituted smoke-free workplace policies. A "No-Tobacco Day" rally was held on 31 May 1991 and was considered to be highly successful because of the extent of

The complete proceedings of the Senegal summit are available from Dr Dee Burton, Prevention Research Center, School of Public Health, University of Illinois at Chicago, 850 West Jackson Boulevard, Room 416, Chicago, Illinois 60607, USA. Tel (1 312) 996 7222; fax (1 312) 996 2703.

participation by the media and by the public – in particular, women and schoolchildren.

One suggestion from the rally was to hold symposia for different groups of people, such as law enforcement agents. A symposium for police was held on 4 November 1991; the meeting was chaired by the director general of the Nigerian Institute of Advanced Legal Studies. One of the most striking results of the meeting was the discovery that none of the police had ever seen a copy of the tobacco control decree. Thus, an important outcome involved empowering the police to enforce the law by familiarising them with its details and intent.

The very different roles of police and responses of citizens to police in different African countries were critically examined by the summit participants.

EGYPT

The anti-smoking campaign started in Egypt in 1977. The first anti-smoking workshop was sponsored by the UICC in 1979. Following this workshop, the Egyptian Medical Association and the Egyptian Cancer Society prepared a background paper, which was sent to the Egyptian parliament in 1980. As a result of this document comprehensive tobacco control legislation was passed in 1981, prohibiting smoking in public places, establishing a partial advertising ban, and setting limits for tar and nicotine yield for all cigarettes sold within the country. The parliament's debate of these various issues was covered widely by the media, which helped to fuel the anti-smoking movement.

In collecting smoking prevalence data for Egypt, the World Health Organisation questionnaire items were used with the regular census collection. Similarly, some data concerning economic consequences were obtained in conjunction with another national, representative survey, thus making the data collection quite inexpensive. The Egyptian family allocates, on average, about 5% of its household budget for tobacco products, compared with 3·2% for medical care and 1·8% for culture and sports. An estimated 20% of the population over 12 years of age smoked in 1986. By 1988 there was a slight drop in smoking rates.

Awareness that smoking is a health hazard is almost universal (99·5% of smokers, according to one study). The success of the information campaign is attributed primarily to television. Current educational programmes of the anti-smoking campaign are directed at specific subgroups of the population, most notably physicians and the army.

Finally, there are no cigarette vending machines in Egypt.

ZAMBIA

Zambia has had a total tobacco advertising ban since 1972. The only time that cigarettes are seen in advertisements is once a year when the "sports man" of the year is chosen, and the advertisement shows a pack of cigarettes.

The Zambian Anti-Smoking Society leads the tobacco control effort; its working committee includes police officers, public service workers, an economist from the Ministry of Finance, two officials from the Ministry of Health, and educators. Tobacco growing has been declining in Zambia in recent years.

One potential problem arose in 1990 when the National Service administered a camp for youths to enable them to grow tobacco. (The National Service workers are unemployed youth and school dropouts. The national Service collects these young men and women from throughout the country and brings them into camps to work.) The Zambian Anti-Smoking Society is planning to meet with the commandant of the National Services to recommend diversion from tobacco crops to maize or other crops badly needed in the country. There is a need to both stop famine and cultivate land. Currently Zambian farmers cannot produce enough maize to feed the population. In addition, substantial areas of forest are reported to have been destroyed for the tobacco curing process; this is not yet a major problem, but there is a fear that it soon will be if the National Service continues to promote tobacco growing.

UGANDA

The history of smoking control in Uganda, though brief, is full. It began with participation of Ugandans in the UICC-sponsored workshop in Tanzania in 1988. As a result, in 1989 the Uganda Anti-Tobacco Association (UGATA) was formed and its first activity was to organize the UICC workshop held in Mukono, near Kampala, in November 1990. At the same time a second group consisting primarily of businessmen formed the Uganda Smoke-Free Society with one of the doctors.

Recommendations of the Mukono workshop included specific objectives for 1991. The first objective was to consolidate the UGATA coalition, the Uganda Smoke-Free Society, and other groups interested in tobacco control; this was accomplished. Five meetings were held in 1991 before the Senegal summit. A permanent committee and chairperson, secretary, and treasurer were elected. The committee includes a representative of the government political organ, the National Resistance Movement, a representative of the Uganda Moslem Supreme Council, and an individual from the Ministry of Commerce with a special interest in economics.

The second objective was to develop research proposals for submission for funding; four were developed, and one of these has recently been approved for funding. A third objective was to publish the proceedings of the Mukono workshop, which included formal presentations; these will be available in the summer of 1992.

Finally, a fourth objective was to carry out some activities to increase awareness of health

and tobacco issues in Uganda, and an anti-tobacco television programme for children was produced. In addition, Rotary International through the Uganda Art Foundation donated funds to pay for public health talks. They also produced 1000 T shirts and 1000 stickers, which were distributed on 31 May 1991 (World No-Tobacco Day) to railways, buses, and minibuses, as well as to government offices.

UGATA is currently focusing on promoting some legislative changes, beginning with regulation of smoking in public places.

LIBERIA

Liberia has been in civil war for almost two years; a partial peace now exists. Before the war tobacco advertising was widespread. There were no tobacco control regulations. Liberians grow tobacco only on a small scale, for local consumption. The tobacco control effort is on hold until the country is able to attain peace and begin to repair its infrastructure and restore basic services for the population.

SENEGAL

There are several individuals active in tobacco control in Dakar, and significant programme activities have been sponsored by the International Union Against Tuberculosis and Lung Disease. During the week of the summit, representatives of the Dakar Anti-Smoking Society, the CRDI/IDRC, and the UICC met to discuss possible future collaborations in Senegal, and more generally with francophone Africa.

KENYA

The most salient recent success of the Kenyan programme was the total defeat of the Marlboro rally. The strategy was first of all a political manoeuvre, claiming that Philip Morris cares about British and American children dying but not about Kenyan children dying. During the anti-Marlboro campaign, Patrick Sheahy flew to Nairobi to meet with President Moi of Kenya to support the rally. The Marlboro rally was a $1 million, three day event. The second step of the success of the anti-tobacco group then was in finding other, non-tobacco sponsors – for example, Kodak and a Japanese computer company – which together funded the rally after Marlboro's defeat.

This year about 6000 schools throughout Kenya participated in anti-tobacco competitions for poems, jingles, songs, themes, and dramatic events.

A two-person office in Nairobi has been responsible for most of the tobacco control events, including the rally defeat and the countrywide school competitions, as well as the broadcast of television and radio anti-smoking programmes.

Action issues

The tobacco control leaders addressed in detail four specific action issues: funding needs, research priorities, Africa's contributions to the then upcoming Buenos Aires conference, and communications needs. New funding for the African programme from the CRDI/IDRC was announced.

Significant attention also was given to the potential of African women in leading the tobacco control movement in their respective countries, to the continuing practice of selling single cigarettes in some countries, and to the issue of taxation. Several summit participants felt that tax increases may not constitute a recommended action for their countries at this time because of the need for more anti-smoking education first; however, it was agreed that research on this topic is needed.

* * *

This work session was the UICC's first meeting in a francophone African country. The summit was officially opened by the Minister of Urban Affairs on behalf of the Minister of Health of Senegal. All summit members then participated in a bilingual press conference. The meeting received television, radio, and newspaper coverage in Dakar. The summit has paved the way for a greater emphasis on francophone Africa. One of the outcomes of the summit was a decision for the UICC to sponsor its first countrywide workshop for francophone Africa in 1993 (the site is not yet selected), with the hope that this workshop might be a collaboration with other international organisations and might serve also as a summit of francophone African tobacco control leaders.

The next UICC-sponsored countrywide workshop will be held in Lagos, Nigeria, in November 1992.

For further information contact: Mrs Isabel Mortara, Head, Education Department, 3 rue du Conseil-General, 1205 Geneva, Switzerland. (Tel 41 22) 320 18 11; fax (41 22) 320 18 10.

CITATIONS

Citations is a list of recently published papers and reports that the editors believe make an important and original contribution to the various fields in tobacco control. Copies of unpublished, private, or generally hard to get reports that deserve wider notice are also of interest to Tobacco Control *and should be sent to Simon Chapman, deputy editor, at the address given on the inside front cover.*

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CALENDAR OF EVENTS

Full details of events to be included in the calendar should be sent to Ms Sharon Davies, technical editor, Tobacco Control, BMA House, Tavistock Square, London WC1H 9JR, United Kingdom.

National Wellness Institute

17th annual national conference
12–19 July 1992, Stevens Point, Wisconsin, USA
Further details: Linda Zorn Newcomb, National Wellness Institute, Inc, 1319 Fremont Street–South Hall, Stevens Point, WI 54481, USA. (Tel (1 715) 346 2172; fax 1 715) 346 3733.)

Third International Conference on Head and Neck Cancer

26–30 July 1992, San Francisco, California, USA
Further details: Ruth C Enquist, We Plan Meetings, Inc, 1503 15th Street, NE, Rochester, MN 55904, USA. (Tel (1 507) 285 1523.)

Seventh International Conference on Cancer Nursing

16–21 August 1992, Vienna, Austria
Further details: M Darley, 2nd Floor, Mulberry House, Royal Marsden Hospital, Fulham Road, London SW6 6JJ, United Kingdom.

Fifth National Conference on Nicotine Dependence

17–19 September 1992, Seattle, Washington, USA
Further details: Virginia Roberts, American Society of Addiction Medicine, 5225 Wisconsin Avenue, NW, Suite 409, Washington, DC 20015, USA. (Tel (1 202) 244 8948; fax (1 202) 537 7252.)

First UICC International Conference on Women and Smoking

5–7 October 1992; Slieve Donard Hotel, Newcastle, County Down, Northern Ireland, United Kingdom
Further details: Conference Secretariat, Ulster Cancer Foundation, 40–42 Eglantine Avenue, Belfast BT9 6DX, Northern Ireland. (Tel (44 232) 663281; fax (44 232) 660081.)

American School Health Association

66th annual conference, Changes in the American family: the impact on school health
9–12 October 1992, Clarion Plaza, Orlando, Florida, USA
Further details: D A Davis, Executive Director, PO Box 708, Kent, OH 44240, USA. (Tel (1 216) 678 1601.)

Tobacco at the Workplace

10 October, Brussels, Belgium
Further details: Oeuvre Belge du Cancer, 21 rue des Deux Eglises, 1040 Brussels, Belgium.

Europe Against Cancer Week

Cancer prevention and health promotion in the workplace
12–18 October 1992
Further details: Janet Marshall, Europe Against Cancer Programme, European Commission, 8 Storey's Gate, London SW1P 3AT, United Kingdom.

Action on Smoking and Health (ASH)

21st birthday conference
19 October 1992, Royal College of Physicians, London, United Kingdom
Further details: Helen Ryder, ASH, 109 Gloucester Place, London W1H 3PH, United Kingdom. (Tel (44 71) 935 3519; fax (44 71) 935 3463.)

Seventh National Conference on Chronic Disease Prevention and Control

21–23 October 1992, Salt Lake City, Utah, USA
Further details: Dr John Livengood, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control, 1600 Clifton Road, NE, Mailstop K-45, Atlanta, GA 30333, USA. (Tel (1 404) 488 5532; fax (1 404) 488 5964.)

Third EMASH Seminar (European Medical Association on Smoking or Health)

Economic issues of smoking and quitting smoking
22–24 October 1992, Hotel Sheraton Nikolaus, Bari, Italy
Further details: Professor P Fréour, President, 26 rue Millière, 33000 Bordeaux, France. (Tel (33 56) 91 64 01; fax (33 56) 91 79 83.)

Association of European Cancer Leagues

Annual conference and general assembly, The political role of the cancer leagues
6–8 November 1992, Budapest, Hungary
Further details: c/o Danish Cancer Society, 35 Rosenvaengets, Hovedvej, 2100 Copenhagen, Denmark.

American Public Health Association

120th annual meeting
8–12 November 1992, Washington, DC, USA
Further details: Mr Bob Johnson, Director of Conventions, American Public Health Association, 1015 Fifteenth Street, NW, Washington, DC 20005, USA. (Tel (1 202) 789 5600.)

American Association for Cancer Education

18–21 November 1992, Houston, Texas, USA
Further details: C Harreld, Conference Services, Box 131, 1515 Holcombe Boulevard, Houston, TX 77030–4075, USA. (Tel (1 713) 792 2222.)

Great American Smokeout

19 November 1992
Further details: Sue Kirkland, American Cancer Society, 1599 Clifton Road, NE, Atlanta, GA 30329, USA. (Tel (1 404) 329 7907.)

STAT '92: Building the Movement

20–22 November 1992, Springfield, Massachusetts, USA
Further details: Stop Teenage Addiction to Tobacco (STAT), 121 Lyman Street, Suite 210, Springfield, MA 01103–1315, USA. (Tel (1 413) 732 7828; fax (1 413) 732 4219.)

Face au Tabagisme: Xèmes Journées Psychologie et Cancers

3–5 December 1992, Nancy, France
Further details: Professeur C Chardot, Centre Alexis Vautrin, Avenue de Bourgogne Brabois, 54511 Vandoeuvre-Les-Nancy Cedex, France.

Art and Science of Health Promotion Conference

Health promotion: What's the impact?
24–27 February 1993, Hilton Head Island, South Carolina, USA
Further details: Trish Lightner, American Journal of Health Promotion, 1812 South Rochester Road, Suite 200, Rochester Hills, MI 48307–3532, USA. (Tel (1 313) 650 9600.)

American Society of Addiction Medicine

29 April–2 May 1993, Westin Bonaventure, Los Angeles, California, USA
Further details: J F Callahan, DPA, Executive Vice President, 5225 Wisconsin Avenue, NW, Suite 409, Washington, DC 20015, USA. (Tel (1 202) 244 8948.)

World No-Tobacco Day

Health services, including health personnel, against tobacco
31 May 1993
Further details: Dr Claire Chollat-Traquet, WHO Tobacco or Health Programme, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. (Tel (41 22) 791 21 11; fax (41 22) 791 07 46.)

Third International Conference on Preventive Cardiology

27 June–1 July 1993, Oslo, Norway
Further details: Conference Secretariat, Statens helseundersøkelser (SHUS), PO Box 8155 Dep, N-0033 Oslo, Norway.

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SPECIAL REPORT

Smoking and Health in the Americas

A 1992 Report of the Surgeon General, in collaboration with the Pan American Health Organization

Executive Summary

On 12 March 1992 US Surgeon General Antonia C Novello released the 1992 Surgeon General's report on smoking and health. The report, produced in collaboration with the Pan American Health Organisation (PAHO), is the 22nd Surgeon General's report on smoking and health, and the first to have an international focus. It deals with smoking and health in the Americas, paying particular attention to Latin America and the Caribbean.

The complete report contains 213 pages, 69 tables, and eight figures. The executive summary is reproduced below. The acknowledgments section has been omitted; it lists 11 editors, nine contributing authors, 44 reviewers, and 39 other contributors.

A form for ordering the complete report is reproduced below. The report is available in English and Spanish. Additional copies of the executive summary and a consumer oriented four page summary ("At a Glance") are available – in English and Spanish – from the Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control, 1600 Clifton Road, NE, Atlanta, Georgia 30333, USA (tel (1 404) 488 5705; fax (1 404) 488 5939).

PAHO is publishing a report entitled Tobacco or Health: Status in the Americas, 1992 *(PAHO Scientific Publication No 536). It accompanies the 1992 Surgeon General's report and contains information available as of late 1990 on tobacco use, tobacco related disease, and tobacco-use prevention and control efforts for the Region of the Americas, excluding the United States. The PAHO report (approximately 360 pages in length) contains information on each country and other political entities in the region. It will be available from PAHO in mid-1992 from the Tobacco or Health Program, Pan American Health Organisation, 525 23rd Street, NW, Washington, DC 20037, USA (tel (1 202) 861 3266; fax (1 202) 223 5971).*—ED

Feb 14, 1992

TO: The Honorable Thomas S. Foley
Speaker of the House of Representatives
Washington, D.C. 20515
and
The Honorable Dan Quayle
President of the Senate
Washington, D.C. 20510

It is my privilege to transmit to the Congress the 1992 Surgeon General's report on the health consequences of smoking as mandated by Section 8(a) of the Public Health Cigarette Smoking Act of 1969 (Pub. L. 91-222). The report was prepared by the Centers for Disease Control's Office on Smoking and Health in conjunction with the Pan American Health Organization.

The topic of this report, *Smoking in the Americas*, reflects a concern for the broader problems posed by tobacco consumption. The report explores the historical, social, economic, and regulatory aspects of smoking in the Western Hemisphere. It defines the current extent of tobacco control activities in the countries of the Americas and stresses the need for regional coordination and cooperation in our efforts to create a smoke-free society.

The countries of North America—the United States and Canada—are in the midst of a major epidemic of smoking-related disease, including cancer, heart disease, chronic obstructive lung disease, and adverse outcomes of pregnancy. The countries of Latin America and the Caribbean now show evidence of a rising prevalence of smoking, particularly among young people, and in the absence of efforts to decrease tobacco use, are likely to be swept by a similar epidemic.

I believe that we in the United States must provide leadership through continued efforts to control tobacco consumption and prevent the uptake of smoking by young people. In addition, I believe that we must participate fully in regional efforts to develop effective smoking-control programs.

Sincerely,
Louis W. Sullivan, M.D.
Secretary of Health and Human Services
Washington, DC 20201

Foreword

By the mid-1980s, an estimated 526,000 people in the Americas were dying each year of diseases that are directly attributable to smoking. The number continues to increase. Most of these deaths occur in Canada and the United States, where smoking has been a widespread, entrenched habit for over 60 years. However, approximately 100,000 deaths occur annually in the countries of Latin America and the Caribbean. We are in the unfortunate position of watching an epidemic—like the one we are currently living with in the United States—begin to gather momentum among our neighbors.

The determinants of smoking are complex.

Many forces are brought to bear on the young person who is deciding whether or not to smoke. The current overall prevalence of smoking in a population—a general measure of its social acceptability—plays a large role. The frequency with which peers or role models smoke may be even more important. The current laws and regulations that govern smoking may influence the decision, as do the price of cigarettes and the ease with which they can be purchased. The extent to which tobacco products are advertised and the forms and mechanisms for tobacco promotion are also likely to have a major influence on a young person's decision. All of these combine in an intricate way to create a social norm; the individual decision is hardly an isolated and independent event.

Considerable gains have been made against smoking in Canada and the United States in recent years. As documented in previous Surgeon General's reports, the prevalence of smoking in the United States has been falling at a rate of approximately 0.5 percentage points per year. But millions continue to smoke, and the current rate of decline will not reduce smoking prevalence to the goal of 15 percent set for the year 2000. It is clear that the efforts under way in the United States and Canada are important in maintaining the momentum of smoking abatement, but it is equally clear that they are insufficient. More sectors of society must be brought into the nonsmoking coalition, and the tools at our disposal must be further strengthened.

Other countries of the Americas face different circumstances. For some, still in the process of economic development, the prevalence of smoking is still low, and the problem may have a lower priority than more acute public health concerns. For others, further along in their development, diseases associated with smoking are already major causes of death, and the prevalence of smoking is high among young people in urban areas. Overall, the impact of smoking-related illness is not yet as evident in the other countries of the Americas as in Canada and the United States. However, the high prevalence among young people in many of these countries is ominous. Each country must deal with its problem in its own political, economic, and cultural context. Nonetheless, the countries of the Americas face a common threat, even though they may be in differing stages of its evolution. A common approach, characterized by agreement on goals, objectives, and means, can benefit the entire region.

The Pan American Health Organization (PAHO) has taken significant steps to establish a forum for the exchange of ideas and for the development of a joint plan of action. As a regional branch of the World Health Organization, PAHO in turn takes part in an international forum for coordinated action against tobacco. The individual decision to smoke—both now and in the future—will ultimately be influenced by these efforts of the global community.

This Surgeon General's report is the twenty-second in a series that was inaugurated in 1964 and mandated by law in 1969. The current report looks at the place of smoking in the societies of the Americas and at the current efforts to prevent and control tobacco use. It is perhaps best viewed as a planning document, a portrayal of the current situation in the Americas that will provide the basis for a concerted approach to future prevention strategies.

James O. Mason, M.D., Dr.P.H.
Assistant Secretary for Health,
Public Health Service
William L. Roper, M.D., M.P.H.
Director, Centers for Disease Control

Preface

This 1992 report of the Surgeon General, *Smoking and Health in the Americas*, is the second on smoking and health during my tenure as Surgeon General. Over the years, the reports have systematically examined the effect of smoking on human health: the biologic effects of substances in tobacco, the risks of disease, the susceptibility of target organs, the addictive nature of nicotine, and the evolving epidemiology of the problem. The reports summarize a massive amount of information that has accumulated on the untoward effects of tobacco use, now easily designated the single most important risk to human health in the United States. The 1990 report, *The Health Benefits of Smoking Cessation*, documented the positive impact of quitting and thus furthered the logical argument leading to a smoke-free society.

This report is a departure from its predecessors in that it treats the evidence against smoking as an underlying assumption. The issue for the future is how we will go about achieving a smoke-free society, and a consideration of smoking in the Americas is an early step in that direction. The report explores the historical, epidemiologic, economic, and social issues that surround tobacco use in the

US Surgeon General Antonia C Novello

Americas. It focuses on cultural antecedents and trends, on social and economic structure, and on the local, national, and regional efforts that are currently under way to control tobacco use.

One of the striking inferences to be drawn from the report is that the countries of the Americas occupy a continuum of consequences related to smoking. This continuum appears to be related to overall economic development. Countries that are further along the path of industrialization have gone through a period of high smoking prevalence and are now experiencing the incongruous combination of declining prevalence and increasing morbidity and mortality from smoking. Other countries, substantially along the path, are entering a period of high prevalence and may also be experiencing some of the disease and disability associated with smoking. Still others, less developed industrially, have low prevalences of smoking and relatively lower estimates for smoking-attributable mortality, but must contend with numerous other public health issues.

Not all countries fit easily into such a simple classification. Within countries, there is considerable diversity in the pace of industrialization, urbanization, and general development as well as in the manifestation of the effects of tobacco use. But the classification is useful in defining the pathway that all countries are likely to take. In the absence of coordinated action, the epidemic of tobacco use is likely to proceed according to a well-defined script: gradual adoption of the smoking habit, long-term entrenchment of tobacco use, and a major loss of human life.

The forces that create this script are complex and often difficult to untangle. One of the major findings of the report is the crucial role of surveillance in understanding the intricate interrelationship of the factors that influence smoking. The educational level of the population, for example, illustrates the complexity. Data from selected sources indicate that smoking is more prevalent among highly educated women than among less-educated women. One would think that increased education would be linked to a greater awareness of and concern about the health consequences of smoking, but this assumption appears incorrect. It may be that a higher education level, especially in developing countries, imparts, greater susceptibility to messages that promote positive associations with smoking. Only through systematic monitoring of smoking prevalence as well as of the knowledge, attitudes, and behaviors of the population can we appreciate the underlying reasons for the current epidemiologic configuration. Such appreciation, in turn, is the basis for a rational prevention and control program.

Another area in which surveillance is critical is in the monitoring of the tobacco sector of the economy. Such monitoring should include production, consumption, price structure, and taxation policy as well as advertising and promotion of tobacco products. The structure of the industry in any country will have important ramifications for the growth and "success" of the commodity. One of the fundamental paradoxes of market-oriented societies is that some entrepreneurs—even acting completely within the prescribed rules of business practice—will come into conflict with public health goals. The market structure of the tobacco industry constitutes a major threat to public health simply because the product is tobacco. In the tobacco industry, attempts to control a large market share, marketing to target groups, widespread use of innovative promotional techniques, and corporate growth, development, and consolidation—in short, the traditional elements of successful entrepreneurial activity—are ultimately inimical to the public health. Each country faces its own resolution of this paradox, but recognizing and monitoring it is fundamental to the prevention and control of tobacco use.

Most countries of the Americas have begun to face these complex issues. Several have taken major steps, others tentative ones, but all should recognize the crucial role of international coordination and cooperation. It is clear that although most countries can have significant impact on their own smoking-related problems, the international community can become smoke-free only by acting in concert. The process is an arduous one that begins with multifaceted efforts to change social norms regarding smoking and that moves ultimately to a disappearance of demand for tobacco products. I hope that the current report will serve as an impetus for continuing activity in the control of smoking and for mobilization of international resources toward the goal of a smoke-free society.

Antonia C. Novello, M.D., M.P.H.
Surgeon General

Preface

Diseases related to smoking are an important cause of premature deaths in the world, both in developed and developing countries. Eliminating smoking can do more to improve health and prolong life than any other measure in the field of preventive medicine.

Developing countries, including those of Latin America and the Caribbean, are not behind their neighbors in the north with regard to the tremendous growing problem of noncommunicable diseases related to tobacco consumption.

Over the last three decades, the countries of Latin America and the Caribbean have experienced important changes in their demographic, socioeconomic, and epidemiologic profiles. Increasing numbers of the older, more urban, and especially the poorer populations of the region, are dying of diseases related to lifestyle determinants. Consumption of tobacco is one of these harmful threats to the health and well-being of our populations.

Despite that, in most of the developing countries of our region, not enough attention has been given to generate actions and the kind of information needed for policy and program formulation with regard to tobacco control. It

is also unfortunate that while the transnational conglomerates in control of almost all tobacco production and marketing have directed their efforts toward penetrating developing economies, many governments, given the urgent needs created by other health problems, and in some cases due to financial or economic reasons, consider tobacco control a low priority.

The United States Government and the Pan American Health Organization (PAHO) have been working in a joint effort to generate the information included in the Surgeon General's report, and the PAHO country report, which hopefully will bring more awareness and promote action against smoking in the region of the Americas.

Our collaboration with the Office of the Surgeon General has been highly satisfactory, and it will encourage the development of a regional network for implementing research and exchange of successful experiences in the control of tobacco addiction.

Carlyle Guerra de Macedo, M.D., M.P.H.
Director, Pan American Health Organization

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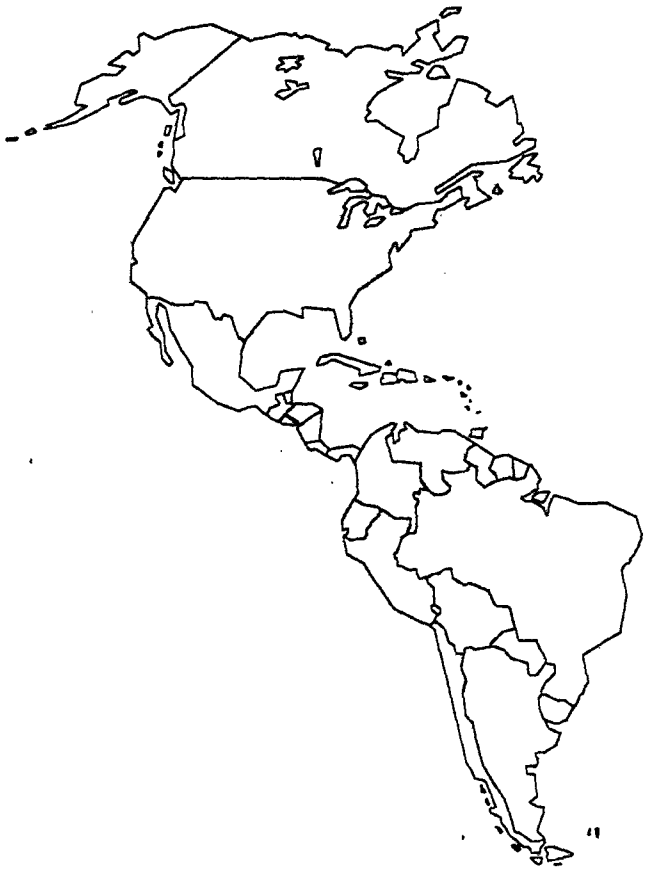

Countries of the Americas

Latin America
- *Andean Area*
  - Bolivia
  - Colombia
  - Ecuador
  - Peru
  - Venezuela
- *Southern Cone*
  - Argentina
  - Chile
  - Paraguay
  - Uruguay
  - Brazil
- *Central America*
  - Belize
  - Costa Rica
  - El Salvador
  - Guatemala
  - Honduras
  - Nicaragua
  - Panama
- Mexico
- *Latin Caribbean*
  - Cuba
  - Dominican Republic
  - Haiti
  - Puerto Rico

Caribbean
- Anguilla
- Antigua and Barbuda
- Bahamas
- Barbados
- Bermuda
- British Virgin Islands
- Cayman Islands
- Dominica
- French Guiana
- Grenada
- Guadeloupe
- Guyana
- Jamaica
- Martinique
- Montserrat
- Netherlands Antilles and Aruba
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and the Grenadines
- Surinam
- Trinidad and Tobago
- Turks and Caicos Islands
- Virgin Islands

North America
- Canada
- United States of America

Data in this report are almost exclusively presented by the above regions. In some instances, however, information is presented separately for the French overseas departments in the Americas (French Guiana, Guadeloupe, and Martinique) and the French territory Saint Pierre and Miquelon, which is in North America. Such instances are noted in the text.

The designations employed and the presentation of the material in this publication do not imply the

expression of any opinion whatsoever on the part of the Secretariat of the Pan American Health Organization or the U.S. Department of Health and Human Services concerning the legal status of any country, territory, city, or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

Chapter 1. Introduction, Summary, and Chapter Conclusions

Introduction

Recognition that the problems posed by personal risks are amenable to social solutions is an important contribution of modern public health. Each person makes choices, but such choices are shaped by social, economic, and environmental circumstances. On an even broader scale, national choices are made in a complex regional or global setting. This report attempts to place the personal risk of smoking in the Americas in the larger context and to underline both the heterogeneity and the interrelationships of nations.

Previous Surgeon General's reports have focused primarily, although not exclusively, on the epidemiologic, clinical, biologic, and pharmacologic aspects of smoking. With the twenty-fifth anniversary report (U.S. Department of Health and Human Services 1989), in which considerable attention was devoted to the social, economic, and legislative aspects of tobacco consumption, the need to place tobacco in a larger context was made apparent. Accordingly, this report now examines the broad issues that surround the production and consumption of tobacco in the Americas.

Development of the Report

The 1992 Surgeon General's report was prepared by the Office on Smoking and Health (OSH), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control, Public Health Service, U.S. Department of Health and Human Services, as part of the department's responsibility, under Public Law 91-222, to report current information on smoking and health to the U.S. Congress.

OSH, a World Health Organization Collaborating Center for Smoking and Health, works closely with the Pan American Health Organization (PAHO). In the Regional Plan of Action for the Prevention and Control of Tobacco Use, PAHO responded to the thirty-third meeting (1988) of its Directing Council, which recommended that PAHO (1) collaborate with the countries of the Americas in the development of national programs for the prevention and control of smoking and (2) cooperate with member states and government and nongovernment centers and groups in identifying and mobilizing resources to contribute to this plan of action (PAHO 1989).

In February 1988, the Surgeon General, then C. Everett Koop, M.D., Sc.D., and the PAHO Director, Carlyle Guerra de Macedo, M.D., M.P.H., agreed to the development of a Surgeon General's report that focuses on smoking in the Americas. OSH and the Health of Adults Program of PAHO began work on this project.

OSH and PAHO presented the concept of a collaborative effort to attendees of the Fourth PAHO Subregional Workshop on the Control of Tobacco (Central America) in November 1988. Meetings of the Latin American Coordinating Committee on Smoking Control were also attended by OSH and PAHO staff in Santa Cruz, Bolivia (January 1989), and in Port of Spain, Trinidad and Tobago (March 1989).

Four experts on tobacco and health (from Brazil, Canada, Colombia, and Costa Rica) served on the Senior Editorial Board, and a collaborator was identified in each of the participating member states. In September 1989, work began on the current report and on a country-by-country summary of the current status of tobacco prevention and control in the Americas, which PAHO is issuing as a companion document to this report (PAHO 1992).

The current report has been prepared from reviews written by experts in the historical, sociodemographic, epidemiologic, economic, legal, and public health aspects of smoking in the Americas. In addition to standard bibliographic sources, the report uses data supplied by the U.S. Department of Agriculture, the Centers for Disease Control, The World Bank, the World Health Organization, the Economic Commission for Latin America and the Caribbean, the Caribbean Community Secretariat, the Latin American Center on Demography, the International Union Against Cancer, the International Organization of Consumers Unions, the American Cancer Society, and the Latin American Coordinating Committee on Smoking Control.

In addition, this report uses information derived from a data collection instrument developed by PAHO (with technical assistance from OSH) for the companion report on the current status of tobacco prevention and control in PAHO's member states. The data collection instrument requested current information on tobacco cultivation, cigarette consumption, legislation, taxation, government and non-government programs to control tobacco, tobacco-use surveys, and tobacco-related disease impact. Detailed information from this data collection instrument was re-

viewed at meetings in Caracas, Venezuela (February 1990), and Port of Spain, Trinidad and Tobago (March 1990), before incorporation into PAHO's country-by-country status report.

Major Conclusions

Five major conclusions have emerged from review of the complex factors affecting smoking in the Americas. The first two relate to the current size of the problem; the latter three, to current conditions that have an important influence on the prevention and control of tobacco use.

1. The prevalence of smoking in Latin America and the Caribbean is variable but reaches 50 percent or more among young people in some urban areas. Significant numbers of women have taken up smoking in recent years.
2. By 1985, an estimated minimum of 526,000 smoking-attributable deaths were occurring yearly in the Americas; 100,000 of these deaths occurred in Latin America and the Caribbean.
3. In Latin America and the Caribbean, the current structure of the tobacco industry, which is dominated by transnational corporations, presents a formidable obstacle to smoking-control efforts.
4. The economic arguments for support of tobacco production are offset by the long-term economic effects of smoking-related disease.
5. Commitment to surveillance of tobacco-related factors—such as prevalence of smoking; morbidity and mortality; knowledge, attitudes, and practices; tobacco consumption and production; and practices; tobacco consumption and production; and taxation and legislation—is crucial to the development of a systematic program for prevention and control of tobacco use.

Summary

The use of tobacco in the Americas long predates the European voyages of discovery. Among indigenous populations, tobacco was used primarily for the pharmacologic effects of high doses of nicotine, and it played an important role in shamanistic and other spiritual practices. Its growth as a cash crop began only after the European market was opened to tobacco in the early and mid-seventeenth century. During early colonial times, the focus for tobacco cultivation shifted from Latin America and the Caribbean to North America, where a light, mellow brand of tobacco was grown. Despite antitobacco movements, the popularity of tobacco increased dramatically after the U.S. Civil War, and by the early part of the twentieth century, the cigarette had emerged as the tobacco product of choice in the United States.

The first half of the twentieth century witnessed a spectacular increase in the popularity of cigarettes and in the growth of several major cigarette manufacturing companies in the United States. Interest in international expansion was minimal until after World War II. In the early 1950s, preliminary reports of the health effects of tobacco first appeared; these were followed in 1964 by the first report of the Surgeon General on the health effects of smoking (Public Health Service 1964). These events, which were accompanied by a downturn in U.S. tobacco consumption, ushered in a period of rapid international expansion by the tobacco companies. Their expansion into Latin America and the Caribbean was typified by a process of denationalization—that is, the abandonment of local government tobacco monopolies and the creation of subsidiaries by U.S. and British transnational tobacco corporations. The transnational companies were particularly successful in altering local demand by influencing consumer preferences. Local taste for dark tobacco in a variety of forms was largely replaced by demand for the long, filtered, light-tobacco cigarettes produced by the transnational companies.

During the 1980s, several divergent forces influenced the consumption of tobacco in Latin America and the Caribbean. Changing demographs (primarily declining birth and death rates and an overall growth in the population), increasing urbanization, improving education, and the growing entry of women into the labor force—all expanded the potential market for tobacco. Although systematic surveillance evidence is lacking, an increased prevalence of smoking among young people, particularly women in urban areas, appears to have occurred during this period. A countervailing force, however, was the major economic downturn experienced by most countries of Latin America and the Caribbean during the 1980s. The result was that despite the increasing prevalence of smoking in some sectors of the population, overall consumption of tobacco declined. Unlike the decline in North America, however, the decline in Latin America and the Caribbean seems to have been based on income elasticity rather than on health concerns.

The health burden imposed by smoking in Latin America and the Caribbean is currently smaller than that in North America. A conservative estimate is that, by the mid-1980s, at least 526,000 deaths from smoking-related diseases were occurring annually in the Americas and that approximately 100,000 of these deaths occurred in Latin America and the Caribbean. Since the smoking epidemic is more recent, less widespread, and less entrenched in Latin America and the Caribbean than in North America, it may be thought of as less "mature"—that is, sufficient time has not yet elapsed for the cumulative effects of tobacco use to become manifest. Because health data from Latin American and Caribbean countries vary in consistency and comprehensiveness, establishing overall trends for morbidity and mortality is difficult. Nonetheless, the available evidence suggests an important contrast between North America on the one hand, and Latin America and the Caribbean on the other. In the United States and Canada, smoking-associated mortality is

high and increasing because of high consumption levels in the past, but prevalence of smoking is declining. In Latin America and the Caribbean, prevalence of smoking is high in some sectors, but smoking-attributable mortality is still low compared with that for North America. This contrast augurs poorly for public health in Latin America and the Caribbean, unless action is taken.

The health costs of smoking are considerable. The U.S. population of civilian, noninstitutionalized persons aged 25 years or older who ever smoked cigarettes will incur lifetime excess medical care costs of $501 billion. The estimated average lifetime medical costs for a smoker exceed those for a nonsmoker by over $6,000. This excess is a weighted average of the costs incurred by all smokers, whether or not they develop smoking-related illness. For smokers who do develop such illnesses, the personal financial impact is much higher.

Available data do not permit a firm estimate for Latin America and the Caribbean. The estimate will probably vary with the health care structure of the country, but the burden is likely to increase with increasing development and industrialization. Nonetheless, early evidence suggests that smoking-prevention programs can be cost-effective under current economic circumstances.

The economics of the tobacco industry in the Americas are complex. Although tobacco had long been thought to be an inelastic commodity, it has been demonstrated to be both price and income elastic. Such elasticity renders tobacco use susceptible to control through taxation and other disincentives. Revenues from tobacco have been an important, though variable, source of funds for governments, but the case for promoting tobacco production on economic grounds is weak. Currently, only a few countries of Latin America and the Caribbean have economies that are largely dependent on tobacco production. The current economic picture, coupled with consumer responsiveness to income and price and the potential health hazards, has created a sufficient opportunity for tobacco control in Latin America and the Caribbean.

This opportunity is reflected, to some extent, in the fact that most countries of the Americas have legislation that controls tobacco use. Restrictions on advertising, the requirement of health warnings on tobacco products, limits on access to tobacco, and restrictions on public smoking have all been invoked. The legislative approach is not systematic, however, and in many countries, the programs have gaps. Furthermore, the extent to which such legislation is enforced is not fully known. Nonetheless, the pace of enactment suggests a growing awareness of the potential efficacy of the legislative approach.

Overall, the public health approach to tobacco control in Latin America and the Caribbean is variable. Many countries have adopted some elements of comprehensive control, including (in addition to legislation and taxation) the development of national coalitions, the promotion of education and media-based activities, and the development and refinement of surveillance systems. Few countries, however, have adopted the unified approach that characterizes, for example, the program in Canada.

The potential exists in the Americas for a strong, coordinated effort in smoking control at the local, national, and regional levels. The high prevalence of smoking that is emerging in many areas is a clear indicator of an approaching epidemic of smoking-related disease. The potential for decreasing consumption in Latin America and the Caribbean has been well demonstrated, albeit by the unfortunate mechanism of an economic downturn. The potential for a decline in smoking prevalence motivated by health concerns has been well demonstrated in North America. Furthermore, the importance of tobacco manufacturing and production to local economies is undergoing considerable scrutiny. Regional and international plans for tobacco control have been developed and are being implemented. For persons in the Americas in the coming years, the individual decision to smoke may well be made in an environment that is increasingly cognizant of the costs and hazards of smoking.

Chapter Conclusions

Following are the specific conclusions from each chapter in this report:

Chapter 2. The Historical Context

1. Tobacco has long played a role, chiefly as a feature of shamanistic practices, in the cultural and spiritual life of the indigenous populations of the Americas. This usage by a small group of initiates contrasts sharply with the widespread tobacco addiction of contemporary American societies.
2. During the latter half of the nineteenth century, amalgamation of major U.S. cigarette firms coincided with the emergence of the cigarette as the most popular tobacco product in the United States.
3. In Latin America and the Caribbean, through a process of denationalization and the formation of subsidiaries, a few transnational corporations now dominate the tobacco industry. The current structure of the industry presents a formidable obstacle to smoking-control efforts.
4. After rapid growth in per capita tobacco consumption in Latin America and the Caribbean during the 1960s and 1970s, a severe economic downturn during the 1980s led to a decline in tobacco consumption. In the absence of countermeasures, an economic recovery is likely to instigate a resurgence of tobacco consumption.

Chapter 3. Prevalence and Mortality

1. Certain sociodemographic phenomena—such as change in population structure,

increasing urbanization, increased availability of education, and entry of women into the labor force—have increased the susceptibility of the population of Latin America and the Caribbean to smoking.

2. The lack of systematic surveillance information about the prevalence of smoking in most areas of Latin America and the Caribbean hinders comprehensive control efforts. Available information reflects a variety of survey methods, analytic schemes, and reporting formats.
3. Available data indicate that the median prevalence of smoking in Latin America and the Caribbean is 37 percent for men and 20 percent for women. Variation among countries is considerable, however, and smoking prevalence is 50 percent or more in some populations but less than 10 percent in others. In general, prevalence is highest in the urban areas of the more-developed countries and is higher among men than among women.
4. The initiation of smoking (as measured by the prevalence of smoking among persons 20 to 24 years of age) exceeds 30 percent in selected urban areas. Although systematic time series are not available, the data suggest that more recent cohorts (especially of women) in the urban areas of more-developed countries are adopting tobacco use at a higher rate than did their predecessors.
5. The smoking epidemic in Latin America and the Caribbean is not yet of long duration or high intensity, and the mortality burden imposed by smoking is smaller than that for North America. By 1985, an estimated minimum of 526,000 smoking-attributable deaths were occurring each year in all the countries of the Americas; 100,000 of these deaths occurred in Latin American and Caribbean countries.
6. The estimate of 526,000 deaths annually is conservative and is best viewed as the first point on a continuum of such estimates. However, it provides an order of magnitude for the number of smoking-attributable deaths in the Americas.
7. The time lag between the onset of smoking and the onset of smoking-attributable disease is foreboding. In North America, a high prevalence of smoking, now declining, has been followed by an increasing burden of smoking-attributable morbidity and mortality. In Latin America and the Caribbean, rising prevalence portends a major burden of smoking-attributable disease.

Chapter 4. Economics of Tobacco Consumption in the Americas

1. Because the health costs of tobacco consumption result from cumulative exposure, they are most pronounced in the economically developed countries of North America, which have had major long-term exposure. Since many countries of Latin America and the Caribbean are experiencing an epidemiological transition, the economic impact of smoking is increasing.
2. The economic costs of smoking are a function of the economic, social, and demographic context of a given country. In the United States, estimated total lifetime excess medical care costs for smokers exceed those for nonsmokers by $501 billion—an average of over $6,000 per current or former smoker. Similar formal estimates for many Latin American and Caribbean countries are not available.
3. Evidence of the cost-effectiveness of smoking control and prevention programs has increased. In Brazil, for example, the cost of public information and personal smoking-cessation services is estimated at 0.2 to 2.0 percent of per capita gross national product (GNP) for each year of life gained; treatment for lung cancer costs 200 percent of per capita GNP per year of life gained.
4. In Latin America and the Caribbean, as GNP increases, cigarette consumption increases, particularly at lower income levels. This effect is attenuated at higher income levels.
5. Advertising tends to increase cigarette consumption, although the relationship is difficult to quantify precisely. Advertising restrictions are generally associated with declines in consumption and, hence, are an important component of tobacco-control programs.
6. The case for promoting increased tobacco production on economic grounds should be reconsidered. Although tobacco is typically a very profitable crop, much of the advantage of producing tobacco stems from the various subsidies, tariffs, and supply restrictions that support the high price of tobacco and provide economic rents for tobacco producers. Although the tobacco industry is a significant source of employment, production of alternative goods would generate similar levels of employment.
7. Increases in the price of cigarettes, which are a price-elastic commodity, cause decreases in smoking, particularly among adolescents. Excise taxes may thus be viewed as a public health measure to diminish morbidity and mortality, although the precise impact of taxes on smoking will be influenced by local economic factors.

Chapter 5. Legislation to Control the Use of Tobacco in the Americas

1. Legislation that affects the supply of and demand for tobacco is an effective mechanism for promoting public health goals for the control of tobacco use.
2. Although the direct effects of legislation are often difficult to specify because of interaction with a variety of other factors, there are numerous examples of an immediate change in tobacco consumption subsequent to the enactment of new laws and regulations.

3. Most countries of the Americas have legislation that restricts cigarette advertising and promotion, requires health warnings on cigarette packages, restricts smoking in public places, and attempts to control smoking by young people. These laws and regulations, however, vary in their specific features. In many areas, the current level of enforcement is unknown.

Chapter 6. Status of Tobacco Prevention and Control Programs in the Americas

1. A basic governmental and nongovernmental infrastructure for the prevention and control of tobacco use is present in most countries of the Americas, although programs vary considerably in their degree of development.
2. The need is now recognized, and work is under way, for developing a comprehensive, systematic approach to the surveillance of tobacco-related factors in the Americas, including the prevalence of smoking; smoking-associated morbidity and mortality; knowledge, attitudes, and practices with regard to tobacco use; tobacco production and consumption; and taxation and legislation.
3. School-based educational programs about tobacco use are not yet a major feature of control activities in Latin America and the Caribbean. The few evaluation studies reported indicate that such programs can be effective in preventing the initiation of tobacco use.
4. Cessation services in most countries of the Americas are often available through church and community organizations. Private and government-sponsored cessation programs are uncommon.
5. Media and public information activities for tobacco control are conducted in most countries of the Americas, but the extent of these activities and their effect on behavior are unknown.

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